ABSTRACT

A transmitter directed, distributed receiver using path diversity provided by the distribution of the receiver. Advantage is taken of the uncorrelated variations over time in the condition of channels between a common transmitter and several users. The greater the variation in the channel condition of a particular channel over time, the greater the increase in total system throughput provided. An access metric represents the instantaneous channel condition of the communication system between each user and the transmitter with respect to the average channel condition of each channel. Alternatively, the access metric represents the instantaneous channel condition with respect to the average data throughput over that channel. The common transmitting station uses the access metric to directly compare the desirability of granting each channel access. The user that has the greatest access metric is provided access to the channel.